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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/613,337 | 07/03/2003 | Jesus Raul Garcia | DP-305021 | 5075 |

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EXAMINER

THOMPSON, KENNETH L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3672

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,337

Applicant(s)

GARCIA, JESUS RAUL

Examiner

Kenn Thompson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claims 2-5 is withdrawn in view of the newly discovered reference to Orain et al., U.S. 6,120,381. Rejections based on the newly cited reference follow.

Claim Objections

Claims 10 and 11 are objected to because of the following informalities:

The recitation "these" in claim 10, line 1 should be changed to "there".

The recitation "these" in claim 11, line 1 should be changed to "there".

The recitation "indentations" in claim 11, line 2 should be changed to "deformations".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Orain et al., U.S. 6,120,381.

Regarding claim 1, Orain et al. discloses in figures 1-11a slip shaft assembly for use with a steering column. Orain et al. discloses an elongated tubular outer shaft (2); an elongated inner shaft (6) extending lengthwise within the outer shaft; and a slip joint coupling the inner and

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outer shafts and operative to transmit torque in opposite directions between the shafts and to enable relative axial movement between the shafts. Orain et al. discloses the slip joint including a plurality of rollers (14) mounted on the inner shaft for rotation about respective roller axes transverse to a longitudinal axis of the inner shaft, wherein the rollers are provided in diametrically opposite, opposed pairs and wherein there are at least two sets of the roller pairs. Orain et al. discloses the slip joint including a single roller track surface (4) associated with each of the rollers on the outer shaft and engaging and rollably supporting each associated roller on only one side (the outer side) thereof during transmission of the torque in the opposite directions.

As to claim 3, Orain et al. discloses the outer shaft (2) includes four of the roller track surfaces (4), two of which are associated with a first of the sets of the roller pairs (14), and the remaining two of which are associated with at least a second of the sets of the roller pairs.

As to claim 4, Orain et al. discloses the sets of roller pairs (14) are arranged 90 offset from one another.

As to claim 5, Orain et al. discloses the single roller track surfaces (4) associated with the first set of roller pairs (14) are arranged to transmit torque between the inner and outer shafts (2,6) in one direction through contact with a first side (outer surface) of the rollers of the first set, and the single set of roller track surfaces (4) associated with the second set of the roller pairs (14) are arranged to transmit torque between the shafts in the opposite direction through contact with an opposite second side (inner surface) of the rollers of the second set.

As to claim 6, Orain et al. discloses the rollers (14) are unsupported by the outer shaft apart from the contact with the single track support surfaces (14).

Regarding claim 7, Orain et al. discloses an elongated tubular outer shaft (2); an elongated inner shaft (6) extending lengthwise within the outer shaft. Orain et al. discloses a plurality of generally V-shaped deformations (generally shown at 3) formed in the tubular shaft and extending lengthwise of the tubular shaft and defining a corresponding plurality of adjacent roller track pairs (4) arranged at about 90 degrees to one another and separated by an inner connecting bridge (18). Orain et al. discloses a plurality of rollers (14) carried by the inner shaft and disposed in torque-transmitting contact with a respective one of the roller tracks of the roller track pairs.

As to claim 8, Orain et al. discloses the plurality of the roller track pairs (4) comprises two of the pairs.

As to claim 9, Orain et al. discloses the roller track pairs are diametrically opposed to one another.

As to claim 10, Orain et al. discloses four rollers.

As to claim 11, Orain et al. discloses two of the generally V-shaped deformations and four rollers.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenn Thompson whose telephone number is 703 306-5760. The examiner can normally be reached on 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J Bagnell can be reached on 703 308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



14 July 2004